Intergroup contact and social change: Implications of negative and positive contact for collective action in advantaged and disadvantaged groups

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Cite as:

Reimer, N. K., Becker, J. C., Benz, A., Christ, O., Dhont, K., Klocke, U., … Hewstone, M. (in press). Intergroup contact and social change: Implications of negative and positive contact for collective action in advantaged and disadvantaged groups. *Personality and Social Psychology Bulletin*.

Abstract

Previous research has shown that (1) positive intergroup contact with an advantaged group can discourage collective action among disadvantaged-group members and (2) positive intergroup contact can encourage advantaged-group members to take action on behalf of disadvantaged outgroups. Two studies investigated the effects of *negative* as well as *positive* intergroup contact. Study 1 (N = 482) found that negative but not positive contact with heterosexual people was associated with sexual-minority students' engagement in collective action (via group identification and perceived discrimination). Among heterosexual students, positive and negative contact were associated with, respectively, more and less LGB activism. Study 2 (N = 1,469) found that *only* negative contact (via perceived discrimination) predicted LGBT students' collective action intentions longitudinally while *only* positive contact predicted heterosexual/cisgender students' LGBT activism. Implications for the relationship between intergroup contact, collective action, and social change are discussed.

Keywords: *intergroup contact, negative contact, collective action, demobilization, LGBT*

Author contributions

N.K.R., M.H. and K.S. designed the research and wrote the paper. N.K.R. recruited participants for Study 1, and analyzed the data. N.K.R., J.C.B., A.B., O.C., K.D., U.K., S.N., and M.R. (listed alphabetically) formulated hypotheses, designed and translated measures, and recruited participants for Study 2, and commented on a prior draft of this article. M.H. and K.S. share senior authorship.

Acknowledgments

We thank Matthew Hornsey, John Dixon, and an anonymous reviewer for their insightful and encouraging comments. This research was supported by an *Economic and Social Research Council, Advanced Quantitative Methods* studentship to the first author.

Introduction

Previous research has consistently found contact between social groups to reduce prejudice and intergroup conflict (Al Ramiah, & Hewstone, 2013; Pettigrew & Tropp, 2006; 2011). However, recent research has shown that intergroup contact may have the unintended consequences of entrenching inequality by discouraging disadvantaged-group members from collective action. Researchers argued that in historically unequal societies, positive contact with advantaged-group members could create a false sense of intergroup equality and, thus, stifle support for social change (Dixon, Levine, Reicher, & Durrheim, 2012; Wright & Baray, 2012).

While most prior research focused on *positive* intergroup contact, recent research (e.g., Barlow et al., 2012) has emphasized the need to also study the effects of *negative* contact. Further, several studies (e.g., Becker, Wright, Lubensky, & Zhou, 2013) showed the so-called demobilizing effect of positive contact to be contingent on the specific conditions of contact. Negative contact could increase collective action among disadvantaged-group members by increasing ingroup identification, highlighting discrimination, inciting anger, and reducing favorable outgroup attitudes. While most research on collective action focuses on disadvantaged-group members, some studies (e.g., Cakal, Hewstone, Schwär, & Heath, 2011) demonstrated that positive contact can lead advantaged-group members to support the disadvantaged group's struggle. The present research investigated the differential effects of positive and negative contact on collective action in disadvantaged (Studies 1a, 2a) and advantaged (Studies 1b, 2b) groups.

(De-)Mobilizing disadvantaged groups

Demobilizing effects of positive contact

Though agreeing on the aim – ending discrimination and social injustice – prejudice reduction and collective action approaches emphasize different means to and targets of social change. Intergroup contact theory (Allport, 1954; Brown & Hewstone, 2005) states that positive interactions with outgroup members improve an individual's attitudes, beliefs, and feelings toward that group. Though not the only outcome of contact (Hewstone, 2009), reducing prejudice among advantaged-

group members is presumed to reduce discrimination in interactions with disadvantaged-group members and, in the long run, intergroup inequality. Proponents of intergroup contact thus seek to redress social injustice by changing how the advantaged think and feel about the disadvantaged group.

Rather than focus on the 'hearts and minds' of the dominant group, collective action researchers study the conditions under which subordinate-group members take action to improve their group's position in society (Wright, 2013). Central to this perspective is that discrimination is the product of historical and structural inequalities rather than individual minds (Blumer, 1958). Social change begins with disadvantaged-group members challenging the status quo through mass mobilization and political action. Proponents of collective action thus seek social change by mobilizing the disadvantaged to challenge structural injustice.

Some researchers argue that, at least in historically unequal societies, these two routes to social change are conflicting rather than complementary. Collective action, on the one hand, is facilitated by: disadvantaged-group members (1) identifying with their ingroup, and (2) recognizing their relative disadvantage (van Zomeren, Postmes, & Spears, 2008); (3) feeling anger about that discrimination (van Zomeren, Spears, Fischer, & Leach, 2004), and (4) endorsing negative characterizations of advantaged outgroups (Dixon et al., 2012; Simon & Klandermans, 2001). Positive contact, on the other hand, has been found to weaken these four facilitating factors and could hence undermine collective action (*demobilization hypothesis*).[1]

First, positive contact can encourage people to identify with a common, superordinate group over their disadvantaged ingroup (Dovidio, Saguy, Gaertner, & Thomas, 2012) and is, at least in some cases, associated with a weaker sense of group identification (Pettigrew, 1997; Verkuyten, Thijs, & Bekhuis, 2010). Second, friendly interactions with advantaged-group members could prompt disadvantaged-group members to doubt the structural discrimination they, in fact, face. Dixon et al. (2010) indeed found Black South-Africans' perceptions of personal and group discrimination to be negatively correlated with positive contact. Third, Tausch, Saguy, and Bryson

(2015) found that cross-group friendship was, via more favorable outgroup attitudes, associated with less anger about discrimination among Latino Americans, suggesting that positive contact can quell group-based anger. Fourth, positive contact is associated with more favorable outgroup attitudes (Pettigrew & Tropp, 2006) and could, thus, make group discrimination seem less plausible. Accordingly, Black South-Africans' positive attitudes toward White South-Africans correlated with less perceived discrimination (Dixon et al., 2010).

Positive contact with advantaged-group members could hence discourage collective action by reducing disadvantaged-group members' group identification (*demobilization-by-disidentification*), perceptions of discrimination (*demobilization-by-perceived-equality*), group-based anger (*demobilization-by-calmness hypothesis)*, and unfavorable outgroup attitudes (*demobilization-by-liking hypothesis*). In line with these hypotheses, positive contact was associated with less collective action in cross-sectional (e.g., Cakal et al., 2011), longitudinal (Tropp, Hawi, van Laar, & Levin, 2012), and experimental research (Becker et al., 2013) among a variety of disadvantaged groups. The present research, in contrast, studied how both negative *and* positive contact relate to collective action.

Mobilizing effects of negative contact

Most research on intergroup contact, including on its demobilizing effect, has studied the effects of positive contact. Recent research, however, has highlighted the importance of also studying the effects of negative contact to understand the overall impact of cross-group interactions. Stephan et al. (2002) found negative interactions, such as being insulted by an outgroup member, to be associated with more prejudice. Though less frequent than positive contact, some researchers found the prejudice-increasing effect of negative contact to be stronger than the prejudice-reducing effect of positive contact (Barlow et al., 2012, Graf, Paolini, & Rubin, 2014). Importantly, while both dimensions of contact uniquely predicted attitudes, they are, if at all, weakly or moderately correlated (r = -.26, Barlow et al., 2012; r = -.06, Dhont & van Hiel, 2009; r = -.16, Heitmeyer, 2005 in Pettigrew & Tropp, 2011). Overall, recent research has underlined the

importance of studying negative and positive contact as related but separate dimensions of intergroup contact, though the present study is the first to consider this distinction in relation to collective action.

As disadvantaged-group members have been found to experience more negative contact than advantaged-group members (Stephan et al., 2002), the potential mobilizing effect of negative contact on collective action should be considered alongside the demobilizing effect of positive contact. Negative contact raises the salience of group membership (Paolini, Harwood, & Rubin, 2010) and could thus encourage disadvantaged-group members to think and feel as group members rather than individuals. Similarly, negative contact could, by increasing group salience, evoke intergroup comparisons and facilitate the perception of discrimination (see Wright, 2013), especially if these experiences are interpreted as manifestations of discrimination. Relatedly, aversive contact experiences could threaten one's self-worth. Disadvantaged-group members could be motivated to attribute negative contact to discrimination to protect their self-esteem (Major, Kaiser, & McCoy, 2003). Unfair treatment, in turn, should incite group-based anger (van Zomeren et al., 2004). Negative contact could hence encourage collective action by fostering identification, highlighting discrimination, and inciting anger.

Finally, as reviewed above, negative contact is associated with less favorable outgroup attitudes. If negative characterizations of advantaged outgroups benefit collective action, negative contact could further mobilize disadvantaged-group members. While positive contact could prevent collective action by reducing group identification, perceptions of discrimination, anger, and negative outgroup attitudes, negative contact could foster collective action by increasing these four factors. The present study investigated the joint effect of positive and negative contact on disadvantaged-group members' engagement in collective action via these four mediating processes.

(De-)Mobilizing advantaged groups

Collective action approaches focus on disadvantaged-group members as agents of social change. Advantaged-group members, however, sometimes join the struggle of the disadvantaged, e.g., as

heterosexual allies in the LGBT movement. Both qualitative (e.g., Russell, 2011) and quantitative (e.g., Fingerhut, 2011) evidence suggests that positive contact often motivates heterosexual allies' involvement in the LGBT movement, but no prior research has examined *how* positive contact increases advantaged-group members' participation in collective action.[2]

Intergroup contact provides an opportunity for social comparison for both disadvantaged and advantaged-group members. In this comparison, advantaged-group members should experience a sense of relative advantage rather than relative deprivation (Leach, Snider, & Iyer, 2007). Relatedly, positive contact promotes perspective-taking and self-disclosure (Pettigrew & Tropp, 2008) and could, thus, sensitize advantaged-group members to structural discrimination. Further, positive contact improves outgroup attitudes (Pettigrew & Tropp, 2006), and these positive feelings toward a disadvantaged outgroup are, in turn, associated with support for egalitarian policies (Pittinsky & Montoya, 2009). Positive contact could hence encourage advantaged-group members to engage in collective action by highlighting discrimination and improving attitudes.

As discussed before, group identification motivates action aimed at advancing the interests of one's ingroup. Cakal et al. (2011) found that White South Africans' strength of ethnic identification correlated positively with their motivation to improve conditions for their ingroup and, via perceptions of relative deprivation, was associated with less support for egalitarian policies. If positive contact weakens group identification (Verkuyten et al., 2010), it could lower resistance to collective action by disadvantaged outgroups. Further, positive contact leads advantaged-group members to seek common identities with disadvantaged-outgroup members (Gaertner, Dovidio, & Houlette, 2013). As emancipation movements are defined by shared goals rather than mere category membership, they can leave room for allies from advantaged outgroups and thus offer a shared identity. Identifying with the disadvantaged is, in turn, associated with collective action intentions (van Zomeren, Postmes, Spears, & Bettache, 2011).

Positive contact could hence encourage activism on behalf of disadvantaged outgroups by reducing ingroup identification (*mobilization-by-disidentification*), creating awareness of structural discrimination (*mobilization-by-perceived-inequality*), improving outgroup attitudes (*mobilization-by-liking hypothesis*), and inspiring identification with the struggle of the disadvantaged (*mobilization-by-movement-identification*). Conversely, negative experiences with disadvantaged-group members could promote negative outgroup attitudes, make it easier to dismiss intergroup injustice, encourage identification with the ingroup, and discourage identification with movements on behalf of disadvantaged groups. Thus, negative outgroup contact likely prevents advantaged-group members from engaging in collective action on behalf of disadvantaged outgroups.

The present research

The present research investigated the previously overlooked simultaneous and differential effects of negative and positive contact on advantaged-group and disadvantaged-group members' engagement for social justice. We predicted that, in line with previous research, positive contact would discourage disadvantaged-group members from engaging in collective action (*demobilization hypothesis*) but would encourage advantaged-group members to engage in collective action for the rights of the disadvantaged. In contrast, we expected that negative contact would mobilize disadvantaged-group members (*mobilization hypothesis*) but demobilize advantaged-group members. We hypothesized that these relationships are mediated by group identification, perceived discrimination, anger (for disadvantaged-group members), outgroup attitudes, and movement identification (for advantaged-group members).

We tested these hypotheses in two studies, one cross-sectional (Study 1) and one longitudinal (Study 2). We recruited lesbian, gay, bisexual, transgender, and/or otherwise non-heterosexual (LGBT+) students (Studies 1a, 2a) and cisgender/heterosexual students (Studies 1b, 2b) as members of disadvantaged and advantaged groups, respectively. We focused on sexual orientation and gender identity because (a) they had not been studied in this context (except: Becker et al., 2013), (b) members of both groups are in frequent contact, and (c) the LGBT movement has

a culture of involving heterosexual people (Russell, 2011), e.g., in gay-straight campus alliances. Moreover, intergroup contact is highly effective in reducing sexual prejudice (Pettigrew & Tropp, 2006; 2011; Smith et al., 2009) and thus makes a good test case for the demobilization hypothesis. Across the two studies, we measured negative and positive contact experiences (predictors), group/movement identification, perceived discrimination, anger (only Study 2), outgroup attitudes (mediators), and collective action intentions (outcome).

Study 1

Method

Participants

Oxford University students completed online surveys for the chance to win up to £100. Study 1a included 233 sexual-minority respondents (129 women, 93 men, 11 responded 'none of these/other'; M_{age} = 22.30, age range: 18–42 years) who identified as gay or lesbian (n = 88), bisexual or pansexual (n = 112), asexual (n = 12), queer or other (n = 11), or were uncertain about their sexual orientation (n = 10).[3] Study 1b included 249 heterosexual respondents (164 women, 83 men, 2 'none of these/other'; M_{age} = 22.67, age range: 18–38 years). We excluded 48 respondents who did not identify as heterosexual/straight, had had sexual relations with a same-sex partner, or were attracted to persons of their own gender more than 50% of the time (Falomir-Piachastor & Hegarty, 2014).

Measures

We measured *sexual orientation* to confirm respondents' status as sexual majority or minority group members. As sexual orientation is multidimensional, spanning self-identification, sexual attraction, and sexual behavior (Sell, 2007), participants' sexuality was assessed with three items (Falomir-Pichastor & Hegarty, 2014): "How do you define your sexual orientation?", "Have you previously had sexual relationships with a same-sex partner?" (yes, no), and "How often do you feel sexual attraction to a person of your own sex?" (0 = *never* to 100 = *all the time*). Participants

then chose to complete the questionnaire for non-heterosexual or heterosexual students, such that non-heterosexual respondents completed measures concerning heterosexual people as the relevant outgroup (Study 1a), and vice versa (Study 1b).

Intergroup contact was measured as how often, from 1 = *never* to 5 = *very often*, respondents had a variety of positive and negative experiences with [non-]heterosexual people (Fell et al., 2016; Stephan et al., 2002). *Negative contact* (α_{1a} = .81, α_{1b} = .70) was measured using five items: being verbally abused, intimidated, threatened with harm, ridiculed, and made to feel unwanted. *Positive contact* (α_{1a} = .75, α_{1b} = .85) was measured using five items: being supported, helped, complimented, befriended, and made to feel welcome.

Group identification was measured using four items (adapted from Doosje, Branscombe, Spears, & Manstead, 1998): "Being [non-]heterosexual is an important part of who I am", "I identify with other [non-]heterosexual people", "Overall, being [non-]heterosexual has a lot to do with how I feel about myself", and "I see myself as [non-]heterosexual" (1 = *strongly disagree*, 7 = *strongly agree*; α_{1a} = .80, α_{1b} = .78).

Perceived discrimination was measured using items adopted from Mays and Cochran (2001) and Garstka, Schmitt, Branscombe, and Hummert (2004). Four items measured *group discrimination* (α_{1a} = .75, α_{1b} = .83): "Non-heterosexual people as a group have been victimized by society", "Historically, non-heterosexual people have been discriminated against more than heterosexual people" (1 = *strongly disagree*, 7 = *strongly agree*), "To what extent does discrimination interfere with non-heterosexual people's pursuit of a full and productive life?", and "To what extent does discrimination make the life of non-heterosexual people harder?" (1 = *not at all*, 4 = *a lot*).

Outgroup attitudes were measured using Wright, Aron, McLaughlin-Volpe, and Ropp's (1997) General Evaluation Scale. Respondents rated how they felt about [non-]heterosexual people in general on 7-point adjective scales: warm-cold, negative-positive, friendly-hostile, suspicious-trusting, respect-contempt, and admiration-disgust. Items formed a reliable scale (α_{1a} = .92, α_{1b} = .96) with higher scores indicating more favorable attitudes.

Collective action intentions (α_{1a} = .90, α_{1b} = .89) were measured as how often, between 1 = *never* and 6 = *very often*, participants would likely engage in six actions (e.g., participating in demonstrations) to advocate for LGB rights and against LGB discrimination. In addition, we corroborated the scale above with two more tangible *behavioral intentions*. Participants indicated how many, between 0 and 100, flyers advocating against LGB discrimination they were willing to distribute and what proportion of their potential winnings (0-100%) they agreed to donate to a charity advocating lesbian, gay, and bisexual rights.

In addition, for sexual-minority respondents only, we also measured their sense of *personal discrimination* (α_{1a} = .77): "I feel like I am personally a victim of society because of my sexual orientation", "I consider myself a person who has been deprived of opportunities that are available to others because of my sexual orientation" (1 = *strongly disagree*, 7 = *strongly agree*), and "To what extent has discrimination made your life harder?" (1 = *not at all*, 4 = *a lot*). For sexual-majority respondents only, we measured how much heterosexual respondents adopted a solidarity-based *movement identity*: "I identify with the values and goals of the LGBT (lesbian, gay, bisexual, and transgender) movement" (1 = *strongly disagree*, 7 = *strongly agree*).

Results and Discussion

We estimated all reported models in *Mplus* 7.4 (Muthén & Muthén, 1998–2015) using robust maximum likelihood estimation (MLR). All constructs were entered as latent variables with (parceled) items as manifest indicators (OA 1.1).[4] Model fit was accepted if $\chi^2/df < 2$, CFI > .90, TFI > .90, and RMSEA < .08 (Byrne, 2012; Little, 2013). We report all parameter estimates with 95% confidence intervals; we estimated the relative magnitude of all direct, indirect, and total effects using bias-corrected bootstrap sampling with 5,000 resamples (Preacher & Hayes, 2008) and standardized indicators. We report descriptive statistics and correlations in OA 1.2.

We employed the following analysis strategy: First, we conducted latent-mean comparisons between the two groups, and then tested whether the relationships of positive and negative contact with collective action were moderated by group status (*Multi-group comparison*).

Second, we estimated the predicted direct and indirect (via group identification, personal and group discrimination, and outgroup attitudes) effects of both types of contact on collective action among minority-group members (*Study 1a*). Third, we estimated the predicted direct and indirect (via group/movement identification, outgroup attitudes, and group discrimination) effects of both types of contact on collective action among majority-group members (*Study 1b*).

Multi-group comparison

We established (partial) measurement invariance of the latent factors of positive and negative contact, and collective action, χ^2 (281) = 425.21, χ^2/df = 1.51, CFI = .95, TFI = .95, RMSEA = .05, indicating that our scales measured comparable constructs among minority and majority-group participants (OA 1.3). As expected for a numerical minority, non-heterosexual participants reported more positive, ΔM_{PC} = 0.39 [0.24, 0.53], and negative, ΔM_{NC} = 0.70 [0.63, 0.87], contact than heterosexual participants as well as stronger collective action intentions, ΔM_{CA} = 0.34 [0.06, 0.62]. Negative and positive contact were negatively correlated among minority, ϕ = -.31 [-.49, -.13], but not majority, ϕ = .02 [-.16, .20], respondents.

Next, we estimated the effects of both types of contact on collective action, and tested whether group status (advantaged vs disadvantaged) moderated these relationships. Positive contact was associated with *more* collective action for advantaged-group members, β = 0.65 [0.48, 0.82], but, contrary to the *demobilization hypothesis*, had no significant effect for disadvantaged-group members, β = 0.19 [-0.06, 0.45], $\Delta\beta$ = 0.46 [0.16, 0.75]. As hypothesized, negative contact was associated with *less* collective action for advantaged-group members, β = -0.47 [-0.84, -0.09], but with *more* collective action for disadvantaged-group members, PE β = .27 [.08, .46], β = 0.37 [0.15, 0.60], $\Delta\beta$ = -0.84 [-1.28, -0.40]. For advantaged-group members, the absolute effect of positive contact was greater than that of negative contact though the difference was not significant, $\Delta\beta$ = 0.18 [-0.22, 0.58]. For participants of both groups, collective action intentions were associated with the numbers of flyers they agreed to distribute (β_{maj} = 15.01 [10.83, 19.33], R^2 = .31 & β_{min} = 11.84 [7.99, 15.69], R^2 = .14) and the potential

winnings they pledged to donate (β_{maj} = 10.26 [6.88, 13.65], R^2 = .14 & β_{min} = 4.70 [0.25, 9.15], R^2 = .02).

Study 1a: LGB+ respondents

Next, we estimated the indirect effects of contact on disadvantaged-group members' collective action intentions via group identification, perceived discrimination, and outgroup attitudes in a structural equation model (see Figure 1). The model fit well, χ^2 (208) = 295.06, χ^2/df = 1.42, CFI = .97, TFI = .96, RMSEA = .04, explaining 46% of the variance in collective action intentions.

[FIGURE 1]

Contrary to the *demobilization-by-disidentification hypothesis*, positive contact was not related to group identification (β = .03 [-.15, .20]). As hypothesized, negative contact was associated with higher identification (β = .27), which was associated with more personal discrimination (β = .40) and collective action (β = .63). Contrary to the *demobilization-by-perceived-equality hypothesis*, positive contact with heterosexual people was associated with neither perceived personal (β = -.09 [-.24, .07]) nor perceived group discrimination (β = -.08 [-.32, .16]). As expected, negative contact was associated with more personal discrimination (β = .63), which, in turn, correlated with perceptions of group discrimination (β = .71). Perceived group discrimination was associated with collective action intentions (β = .35). Against the *demobilization-by-liking hypothesis*, attitudes were not significantly related to perceived group discrimination (β = -.01 [-.23, .21]) or collective action (β = .07 [-.12, .26]).

For ease of comparison, we summarized all indirect paths that share the same immediate predictor of collective action intentions (see Table 1). Indirect paths via group identification, PE β = 0.22 [0.07, 0.51], and perceived group discrimination, PE β = 0.23 [0.07, 0.66], accounted for 17% and 18% of the absolute association between negative contact and collective action, PE |β| = 1.27 [0.35, 3.27].[5] Negative contact was directly associated with collective action, PE β = .44 [0.05, 1.15], accounting for a further 35% of the relationship. The negative but non-

significant indirect path via perceived personal discrimination, PE β = -0.39[-1.21, 0.01], accounted for the remaining 31%. None of the direct or indirect paths from positive contact to collective action were significant.

[TABLE 1]

These findings contradict earlier research demonstrating the demobilizing effects of intergroup contact. Importantly, however, the current study measured contact valence as a bi-dimensional construct while most previous research relied on uni-dimensional measures such as contact quality (e.g., Dixon et al., 2010) or number of outgroup friends. When negative and positive contact are negatively correlated, however, measuring contact valence as a uni-dimensional construct risks conflating the presence of positive contact with the absence of negative contact. To test whether differences in measurement can explain the difference between previous and present findings, we estimated an alternative model in which we included positive contact as the only predictor variable (see Figure 2). In line with the *demobilization-by-perceived-equality hypothesis*, positive contact was associated with lower perceived personal discrimination (β = -.28) when negative contact was not accounted for.

[FIGURE 2]

Study 1b: Heterosexual respondents

For advantaged-group members, we estimated a structural equation model with positive and negative contact as predictors, group and movement identification, outgroup attitudes, and perceived group discrimination as mediators, and collective action intentions as outcome. Contrary to the *mobilization-by-disidentification hypothesis*, group identification was not associated with collective action intentions (β = -.03 [-.15, .10]) or perceived discrimination (β = .04 [-.11, .18]), or outgroup attitudes (β = .10 [-.05, .24]) and was omitted from further analyses. The resultant model fit well, χ^2 (122) = 186.80, χ^2/df = 1.53, CFI = .97, TFI = .97, RMSEA = .05, explaining 53% of the variance in collective action intentions (see Figure 3).

[FIGURE 3]

As hypothesized, movement identification (β = .43) and outgroup attitudes (β = .19) were associated with collective action though, contrary to the *mobilization-by-perceived-discrimination hypothesis*, perceived group discrimination was not (β = 0.09 [-0.04, 0.22]). Indirect paths via movement identification, PE β = 0.23 [0.15, 0.31], and outgroup attitudes, PE β = 0.09 [0.03, 0.16], accounted for, respectively, 40% and 16% of the total association between positive contact and collective action, PE β = 0.56 [0.44, 0.68]. For negative contact, indirect effects via movement identification, PE β = -0.13 [-0.24, -0.06], and outgroup attitudes, PE β = -0.05 [-0.12, -0.01], accounted for, respectively, 61% and 24% of the total effect, PE β = -0.21 [-0.41, -0.04]. In addition, positive, PE β = 0.22 [0.09, 0.35], but not negative, PE β = 0.02 [-0.20, 0.22], contact was directly associated with collective action, accounting for 39% of the total relationship. As the combined effect of positive contact surpassed that of negative contact, Δβ = 0.35 [0.13, 0.55], this study highlighted the importance of positive contact in promoting activism on behalf of disadvantaged outgroups.

Study 2

Study 1 found that negative contact was associated with more collective action among sexual-minority participants. Contrary to prior research, positive contact was unrelated with collective action or perceived discrimination when negative contact was accounted for. For sexual-majority participants, we found that positive and negative contact was associated with, respectively, stronger and weaker intentions to defend the rights of LGB+ people.

While our findings were promising, the cross-sectional design of Study 1 did not allow us to establish the direction of the observed relationships, e.g., whether negative contact with heterosexual people encourages collective action or whether collective action begets negative contact. Study 2 addressed this limitation by using a longitudinal design. Moreover, we included group-based anger for disadvantaged-group members (to test the *demobilization-by-calmness hypothesis*), measured identification with Leach et al.'s (2008) scales (to differentiate the solidarity and centrality

components of self-investment), and recruited transgender students (to extend our study to the whole LGBT+ movement).

Method

Participants

We recruited students from six universities, three in the United Kingdom and three in Germany. Study 2a included 433 respondents (288 women, 116 men, 29 responded 'none of these/other'; M_{age} = 23.13, age range: 18–51 years) who identified as gay/lesbian (n = 113), bisexual (n = 158), pansexual (n = 41), queer (n = 32), questioning (n = 67), asexual (n = 11), or otherwise non-heterosexual (n = 11). We excluded 72 participants who had identified as heterosexual at any time point. Forty-three participants were trans women (n = 2), trans men (n = 7), genderqueer/other non-binary (n = 10), gender-nonconforming (n = 5), genderfluid (n = 11), agender (n = 6), or otherwise transgender (n = 2). Study 2b involved 1,036 heterosexual and cisgender respondents (775 women, 261 men; M_{age} = 24.17, age range: 18–65 years). We excluded 307 individuals using similar criteria as in Study 1b.

Procedure

Participants completed the first survey (T1) in the first half of the academic year (September–December). Of the original sample, 74% returned for the second survey (T2) toward the middle of the academic year ($Mdn_{T2\text{-}T1}$ = 103 days, range = 96–147 days) and 64% for the third survey (T3) toward the end of the academic year ($Mdn_{T3\text{-}T1}$ = 207 days, range = 198–250 days). At each time point, participants answered a range of questions on their sexual orientation and gender identity based on which they filled in different sets of items. LGBT+ respondents answered questions concerning *heterosexual* (S2a) and/or *cisgender people* as the relevant outgroups and *lesbian, gay, bisexual, or otherwise non-heterosexual* (LGB+; S2a) and/or *transgender people* as the relevant ingroups. Cisgender and heterosexual participants (S2b) completed measures with *LGB+* and *transgender people* as the relevant outgroups. As responses for Study 2b were collected as part of a wider study on

intergroup contact and social identity, we measured fewer variables and used shorter scales than in Studies 1 and 2a.

Measures for LGBT+ respondents

Positive and *negative contact* with heterosexual and/or cisgender people, perceived *personal* and *group discrimination* against LGB+ people and/or transgender people were measured with the same scales as in Study 1. The extent to which participants identified with people of the same sexual orientation (e.g., bisexual people), transgender people, and/or the LGBT+ movement was measured using Leach et al.'s (2008) three-item *solidarity* and *centrality* subscales. *Anger* was measured as the extent (1 = *not at all*, 5 = *extremely*) to which respondents felt angry, resentful, furious, and displeased about the discrimination against LGB+ and/or transgender people (Tausch, Saguy, & Bryson, 2015). *Outgroup attitudes* were assessed with a feeling thermometer (Converse et al., 1980). Similar to Study 1, *collective action intentions* were measured as how likely, between 1 = *very unlikely* and 7 = *very likely*, participants would engage in a variety of actions to advance and defend LGBT+ rights.

Measures for heterosexual/cisgender respondents

Participants reported how many, from 1 = *none* to 7 = *more than 16*, gay men, lesbian/gay women, and bisexual people as well as trans women, trans men, and genderqueer people they knew personally. For each outgroup, if they knew any member of that group, respondents indicated how often, on average, they had "*positive/good contact* with [them] – e.g., being supported, made to feel welcome, helped, complimented, or befriended by them" and "*negative/bad contact* with [them] – e.g., being made to feel unwanted, verbally abused, intimidated, threatened, or ridiculed by them" (1 = *never*, 5 = *very often*; adapted from Barlow et al., 2012). *Collective action intentions* were measured as how likely, from 1 = *very unlikely* to 7 = *very likely*, respondents would "take actions – e.g., signing petitions and participating in demonstrations – to advocate for [LGB+/transgender] people's rights and against [LGB+/transgender] discrimination". As in Study 1, all participants further

indicated what proportion of their potential winnings (0-100%) they would donate to "to advance the rights of and reduce discrimination against LGBT+ people" at the end of the final survey.[6]

Results and Discussion

We tested our hypotheses in a series of cross-lagged panel models (see Little, 2013) to establish the direction of the observed effects, e.g., whether contact predicts collective action (forward path), collective action predicts contact (reverse path), or both, while accounting for the effect of each variable on itself over time (autoregressive paths). We report reliability indices (all $\alpha > .70$), descriptive statistics, and latent-variable correlations in OA 2.1. Below, we report results for sexual-minority (Study 2a) and sexual-majority (Study 2b) participants.

For Study 2a, we estimated a two-wave panel model using only responses collected at the beginning (T1) and end (T3) of the academic year. We opted for the simpler model as, in the full model, the relevant constructs remained (mostly) stable across the shorter inter-survey intervals (~100 days) with very few cross-lagged paths in-between.[7] In Study 2b, we tested fewer variables with more participants and were able to use all three waves of data. Unlike Study 1, we could not directly test group status as a moderator since we had different measures for the two samples. Moreover, as only 2–3% (n = 43) of respondents were transgender, we did not have a large enough sample for any meaningful (longitudinal) analyses on this subsample. Similarly, only few heterosexual/cisgender participants reported *any* contact with transgender people. For majority-group respondents, we thus estimated a growth-curve model for transgender-rights activism with contact quantity as a categorical predictor, instead of a cross-lagged model.

Study 2a: LGBT+ respondents

Before testing any longitudinal relationships, we replicated the cross-sectional model of Study 1a (Figure 1) using variables measured at T1 (OA 2.2). In line with prior findings, negative contact was indirectly, PE β = .13 [.04, .22], though not directly, PE β = -.01 [-.15, .11], associated with collective action intentions. Neither direct, PE β = .09 [-.03, .23], nor indirect, PE β = -.06 [-.15, .03], paths from positive contact to collective action were significant.

Next, we tested the hypothesized longitudinal relationships between positive and negative contact, group identification, perceived discrimination, anger, outgroup attitudes, and collective action intentions. Covariance missingness ranged from 3% to 46% across items and waves; we used full-information maximum likelihood (FIML) estimation to handle the missing data. We established measurement invariance and constrained all factor loadings and intercepts to be equal across waves. The resultant model fit well, χ^2 (1040) = 1604.98, χ^2/df = 1.54, CFI = .94, TFI = .93, RMSEA = .04, and explained 70% of the variance in collective action intentions (see Figure 4).

[FIGURE 4]

All autoregressive paths were significant (βs > .48). Similar to Study 1a, negative contact with heterosexual people at T1 predicted group discrimination (β = .13) and group-based anger (β = .13) 6½ months later (T3). Perceived group discrimination at T1 (β = .18), though not anger (β = .01 [-.11, .13]), in turn, predicted collective action intentions at T3. Contrary to the *demobilization-by-disidentification hypothesis*, neither the centrality (β = -.06 [-.18, .06]) nor solidarity (β = .03 [-.07, .14]) dimensions of participants' sexual identity predicted collective action intentions.[8] Outgroup attitudes did not predict collective action (β = .01 [-.02, .03]). Negative contact did not directly predict collective action (β = .00 [-.09, .08]). None of the reverse paths were significant (with the exception of the centrality of participants' sexual identity), supporting the hypothesized direction of the relationships. Contrary to the *demobilization hypothesis*, and in line with Study 1a, none of the direct or indirect paths from positive contact to collective action were significant.

We estimated the mediated effects as the product of the coefficients of the cross-lagged paths from the T1 predictor to the T2 mediator and from the T1 mediator to the T2 outcome (half-longitudinal mediation). As hypothesized, negative contact had an indirect effect on collective action via group discrimination, PE β = 0.03 [>0.00, 0.07]. Contrary to Tausch et al.'s (2015) findings, anger did not mediate the paths from positive, PE β = -0.00 [-0.03, 0.01], and negative,

PE β = 0.00 [-0.02, 0.03], contact to collective action. None of the other direct or indirect paths from T1 contact to T3 collective action were significant after accounting for all other variables, see Table 2. Study 2a thus replicated the indirect association between negative contact and collective action via perceived discrimination.

[TABLE 2]

Study 2b: Heterosexual/cisgender respondents

To test the *mobilization hypothesis*, we estimated a three-wave panel model regressing collective action intentions on positive and negative contact with lesbian, gay, and bisexual people and vice versa, see Figure 5. We established (partial) measurement invariance across the three time points (OA 2.5), χ^2 (146) = 269.29, χ^2/df = 1.84, CFI = .98, TFI = .97, RMSEA = .03. As hypothesized, positive contact predicted collective action across both 3¼ months intervals, β_{T1T2} = .14 and β_{T2T3} = .20. Likewise, collective action at T1 predicted more positive contact at T2 (β_{T1T2} = .05) though collective action at T2 was unrelated to positive contact at T3, β_{T2T3} = .07 [-.06, .20].

[FIGURE 5]

We estimated all possible, direct and indirect, paths between T1 and T3 variables as products of the relevant coefficients. While T1 positive contact predicted, direct and indirect paths combined, more T3 collective action, PE β = 0.21 [0.06, 0.36], T1 collective action also predicted more T3 positive contact, PE β = 0.09 [0.03, 0.16], ΔPE β = 0.12 [-0.05, 0.29]. For advantaged-group members, the relationship between positive contact and collective action was thus bi-directional. Further, T1 collective action was associated with more T3 collective action via positive contact, PE β = 0.03 [>0.00, 0.08], suggesting that collective action begets more collective action by increasing positive contact with disadvantaged-group members. The opposite path was not significant, PE β = 0.01 [-0.01, 0.03]. In contrast to Study 1b, negative contact at T1 was not significantly associated with heterosexual participants' intentions to take actions for LGB+ people's rights and against LGB+ discrimination at T3, PE β = 0.00 [-0.13, 0.14].

Since only 31% of heterosexual/cisgender participants reported *any* contact with transgender people, we did not estimate a cross-lagged model but tested the *mobilization hypothesis* using a linear growth model for collective action for transgender rights and against transgender discrimination. Participants (n = 303) who knew at least one transgender person at the beginning of the academic year had stronger collective action intentions, $\beta_{intercept}$ = 5.09 [4.91, 5.27], than participants (n = 670) without any such experiences, $\beta_{intercept}$ = 4.23 [4.10, 4.36], $\Delta\beta$ = 0.86 [0.64, 1.08]. Across both groups, collective action intentions remained equally stable over the study, β_{slope} = 0.08 [0.16, 0.00] and β_{slope} = 0.01 [0.07, 0.05], $\Delta\beta$ = 0.07 [0.17, 0.03]. While we thus found contact with transgender people to correlate with more activism for transgender rights, we could not establish the direction of the observed relationship.

General discussion

Recent research demonstrated that positive contact with the advantaged group can entrench structural discrimination by discouraging disadvantaged-group members from engaging in collective action (Dixon et al., 2012; Wright & Baray, 2012). Results from one cross-sectional and one longitudinal study qualified and expanded this literature. Studies 1a and 2a found that for disadvantaged-group members, negative contact with the advantaged group was associated with more perceived discrimination and, in turn, more collective action. In contrast to previous research, positive contact was not associated with collective action. Studies 1b and 2b showed that positive contact was associated with advantaged-group members' intentions to take action for the rights of minority-group members. In Study 1b, identification with the LGBT+ movement and favorable outgroup attitudes partially explained this relationship. In the following sections, we discuss implications for mobilizing disadvantaged and advantaged groups, respectively, discuss limitations and propose directions for future research, before outlining how the present findings may reconcile prejudice reduction and collective action approaches to social change.

Negative contact mobilizes the disadvantaged

Contrary to a growing body of cross-sectional (e.g., Cakal et al., 2011), longitudinal (Tropp et al., 2011), and experimental (Becker et al., 2013) research, positive contact was not (negatively) associated with collective action. Rather than contradict previous findings, the present research could change their interpretation. Thus far, researchers explained their observations as support for the *demobilization hypothesis*, the idea that positive contact undermines disadvantaged-group members' motivation for collective action. In contrast, we found positive contact to be negatively related to perceived discrimination *only when* negative contact was not included in the analysis (Study 1a). Since both dimensions of contact were, at least in the minority-group samples, negatively correlated, prior correlational evidence for the demobilizing effects of positive contact could have conflated the presence of positive contact with the absence of negative contact.

Dixon and colleagues (2012) rightly stressed that discrimination manifests itself in subtle ways beyond hostile encounters with the dominant outgroups. In the absence of direct hostilities, they argued, (positive) contact can have system-justifying consequences (Jost, Banaji, & Nosek, 2004) by lulling the oppressed into a false sense of equality. Our research, however, suggests that direct confrontations with advantaged-group members make discrimination visible and that it is the absence of such experiences that impedes collective action. Relatedly, Friedman and Leaper (2010) found that how often sexual-minority participants had experienced discrimination first-hand was an important correlate of collective action. Likewise, Poore et al.'s (2002) research on an Inuit community suggested that isolation not contact breeds ignorance about systemic discrimination. In line with this converging evidence, we call researchers to re-conceptualize the demobilization problematic as the absence of (negative) contact experiences with advantaged-group members.

Our research underlines the importance of considering all types of intergroup experiences, both positive and negative, to understand whether, how and when contact is associated with collective action. In doing so, the present research, alongside other studies on negative contact, highlights the difference between the *reality* of (both positive and negative) contact

and its rarefied *ideal*. Our research studied the former and suggested that when considering contact as it occurs in everyday life, negative not positive interactions with majority-group members predict perceived discrimination and collective action (Study 2a). Dixon et al.'s (2012) argument, however, speaks more to the latter, in particular, to the use of contact in planned interventions. In experimental research, cross-group interactions that were designed to be positive and to avoid the subject of inequality discouraged collective interaction among disadvantaged-group members (Becker et al., 2013). Manipulations that encouraged disadvantaged-group members to identify with a common ingroup rather than their ethnic/racial ingroup had a similar effect (Ufkes et al., 2016).

These studies showed how well-meaning interventions could still have the ironic effect of dampening social change by emphasizing harmony at the expense of openly discussing and acknowledging inequality. Future research should thus carefully study how intervention programs aimed at reducing prejudice impact perceptions of discrimination and collective action. On a final note, attitudes toward the advantaged group were, in line with evidence from Wright and Lubensky's (2009) and Saguy et al.'s (2009, Study 2) research, unrelated to collective action in both studies. This suggests that reducing prejudice is unlikely to be a problem per se – though some specific methods used might be.

Positive contact mobilizes the advantaged

In line with prior research (e.g., Fingerhut, 2011), positive contact was associated with advantaged-group members' conviction to defend and advance the rights of disadvantaged-group members. Though more favorable attitudes *partially* explained this relationship, our findings (Study 1b) indicated that solidarity-based collective action is more than simply another expression of outgroup attitudes. Rather, the present research bolsters earlier findings that positive contact helps to close the so-called 'principle-implementation gap' between dominant-group members' support for the *principle* of equality and their opposition to its *implementation* in policies such as affirmative action (Cakal et al., 2011; Dixon, Durrheim, & Tredoux, 2007). Negative contact, on the other hand, correlated with less collective action in Study 1b (cross-sectional). Compared to positive contact,

however, it was rare and its association with collective action weaker. Further, negative contact did not predict collective action in Study 2b (longitudinal), suggesting that the mobilizing effects of positive contact outweigh the demobilizing effects of negative contact for the advantaged.

Our research provided first evidence that positive contact could encourage advantaged-group members to not only *support* the disadvantaged-groups' struggle but to *identify* with it (Study 1b). In addition, we found that collective action predicted more contact with disadvantaged-group members, while positive contact predicted more collective action (Study 2b). Positive contact may thus prompt a self-reinforcing process resulting in an increasing commitment to activism for the disadvantaged group. Advocacy by privileged allies is potentially important in garnering public support (Czopp & Monteith, 2003; Rasinski & Czopp, 2010). Yet, even without the demobilizing effects of contact, the participation of advantaged-group allies can still hold back social movements (see Droogendyk, Wright, Lubensky, & Louis, 2016 for a review and recommendations).

Limitations

Three features of the present research qualify the conclusions we draw about the relationship between intergroup contact and collective action. First, the choice of samples limited how far our results generalize to other groups. Sexual-minority students likely experience more intergroup contact and less intergroup tension and discrimination than previously studied groups such as Black South Africans. Further, LGBT+ activism centers on civil rights rather than affirmative action and redistribution. Unlike White South Africans (e.g., Cakal et al., 2011), heterosexual/cisgender participants had thus little to lose by supporting LGBT+ advocacy. Second, although our Study 2 constitutes one of only two longitudinal studies in this area of research, both studies were limited by their correlational design. Relatedly, our research speaks more to everyday experiences of contact than planned interventions. Future research should seek to replicate the present findings in experimental and intervention studies, as well as in different contexts.

Lastly, comparing the effects of negative and positive contact is limited by the lack of a 'common unit' of contact valence: being insulted is not necessarily as 'bad' as being befriended is 'good' (see Fell et al., 2016). We hope that future work in this emerging field of research will explicate the relative sensitivity and predictive validity of measures of valenced contact. In a similar vein, our research operationalized collective action as intentions to engage in various activities, e.g., joining a protest or activist group. Although our additional measures, i.e. participants' pledges to donate money, had tangible consequences for their potential winnings, it is unclear to what extent these intentions predicted actual behavior. Likewise, all actions studied required relatively little commitment as we focused on normative collective action. By inciting contempt, however, negative contact could inspire actions beyond normatively accepted expressions of discontent (for a review, see Becker & Tausch, 2015).[9] Future research should thus consider how negative contact relates to both normative and non-normative (actual) collective action.

Intergroup contact and social change

Several researchers (Dixon et al., 2012; Wright & Baray, 2012) argued that prejudice reduction and collective action approaches to social change are contradictory, and that in historically unequal societies, intergroup contact can maintain injustice by undermining collective action. In contrast, the present research suggests that contact and collective action can be complementary routes to social change and that intergroup contact can unite social groups in the struggle against social injustice. Below, we outline the practical implications of each of these points.

Since intergroup contact does not necessarily dampen collective action, prejudice reduction and collective action approaches to social change need not contradict each other. Indeed, as oppression results from power plus prejudice (Operario & Fiske, 1998), the two approaches could complement each other. Contact with minority-group members can, as far as it is positive, reduce prejudice among privileged majority-group members. Improving attitudes of those who hold social power (e.g., over employment or law) should lessen discrimination, both by influencing behavior (e.g., hiring decisions) and by weakening resistance to legislation (e.g., affirmative action).

For minority-group members, on the other hand, intergroup contact can be a necessary opportunity to recognize their relative disadvantage (Poore et al., 2002) and, especially if it entails negative experiences, foment collective action. Intergroup contact could hence both diminish prejudice and promote collective action.

Prejudice reduction and collective action seem to place contradictory demands on cross-group contact: the former requires positive interactions while the latter benefits from negative experiences. This, however, is only a seeming contradiction. Intergroup contact, as it occurs in everyday life, entails both kinds of interactions though minority-group members tend to report more negative experiences than majority-group members (Heitmeyer, 2005 reported in Pettigrew & Tropp, 2011). Differences in status could also mean that the same interaction is perceived as positive by the advantaged participant but ambivalent by the disadvantaged partner. The present research thus does not imply that in order to achieve social change, disadvantaged-group members should be encouraged to seek out aversive encounters with dominant outgroups. Rather, our findings underscore the importance of facilitating desegregation and, in turn, contact (Hewstone, 2009). As discussed before, intervention programs – contact-based or not – should be mindful of potential demobilizing effects and find ways to address intergroup injustice.

Beyond traditional prejudice reduction and collective action approaches, intergroup contact can bridge social divides and unite people in the struggle for social justice. Positive contact can, as suggested in the present research, convince members of the dominant group to support movements against inequality. Similarly, positive contact between different minority groups could lead them to unite and form new coalitions in the pursuit of social justice (Dixon et al., 2015), e.g., in the LGBT+ movement. As intergroup contact could, hence, mobilize the disadvantaged, reduce prejudice among the advantaged, and unite all in the struggle for social justice, the present research offers a compelling case for the importance of intergroup contact for social change.

Notes

[1] While the present research specifically focused on its implications for intergroup contact, the demobilization problematic encompasses a much broader research program on the limitations and (ironic) consequences of prejudice reduction approaches to social change (see Dixon et al., 2012, for a review).

[2] Activism on behalf of disadvantaged outgroups runs counter to Wright's (2013) definition of collective action as improving the position of one's ingroup. If, however, advantaged-group members engage in the collective struggle of the disadvantaged, we refer to their actions as *collective action*.

[3] In order to reach sufficiently large samples, we recruited sexual-minority students as part of two wider studies, in May/June 2013 ($n = 139$) and May/June 2014 ($n = 94$), while we drew heterosexual participants from the first study alone.

[4] We refer readers to relevant sections of the Online Appendix (OA, osf.io/ja258) for further details on methods, analyses, and findings. All relevant research materials, incl. figures, scripts, and data, were shared under the *CC-By Attribution 4.0 International* license.

[5] As indirect effects in Study 1a differed in sign (see Table 1), we computed the *absolute effect*, i.e. the sum of all absolute effect sizes, rather than the *total effect*, i.e. the sum of all positive and negative effect sizes.

[6] As in Study 1, collective action intentions (at T3) correlated with the percentage of their potential winnings that LGBT+ participants ($\beta = 7.46$ [1.61, 13.32]) and heterosexual/cisgender participants ($\beta = 5.14$ [2.80, 7.48]) pledged to donate.

[7] Parsimony aside, we were concerned about the ratio between the number of participants (433) and the number of estimable parameters when employing all three waves (565). Relatedly, estimating indirect effects over all three waves (with missing data) proved prohibitively demanding computationally. Using the full three-wave dataset, however, did not (qualitatively) change our findings and conclusions; see OA 2.3 for details.

[8] We estimated an alternative model in which movement identification replaced the narrower group identification measure; this did not (qualitatively) change any of our conclusion, see OA 2.4.

[9] We thank John Dixon for this suggestion.

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Figures

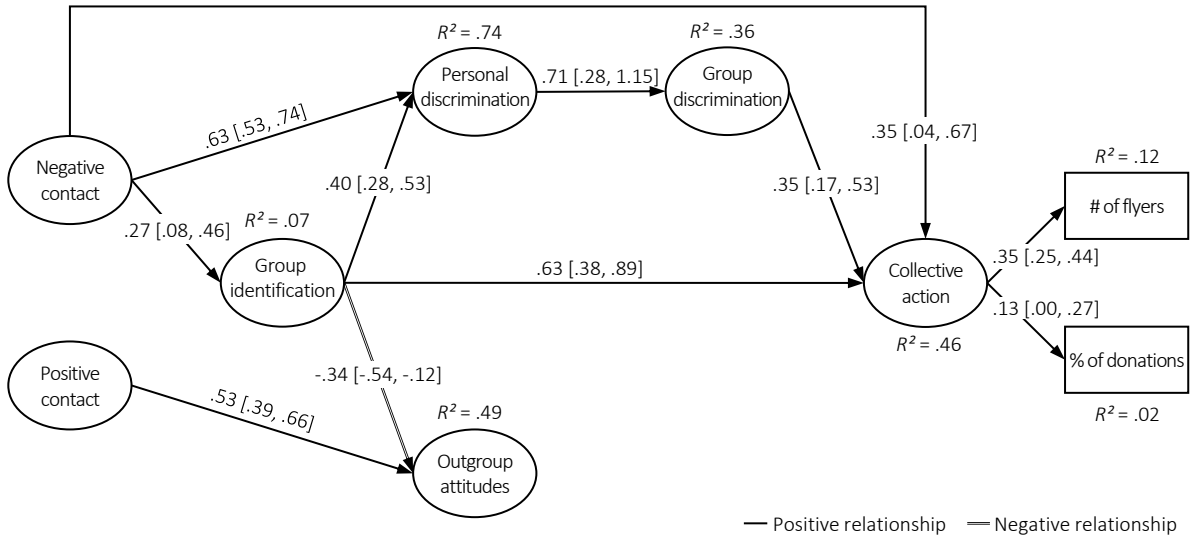

Figure 1. Structural equation model showing direct and indirect paths from negative and positive contact to collective action for sexual-minority participants (Study 1a, n = 233).[4] Negative and positive contact (ϕ = -.32 [-.52, -.12]) were correlated. Standardized coefficients are reported; only significant paths are shown.

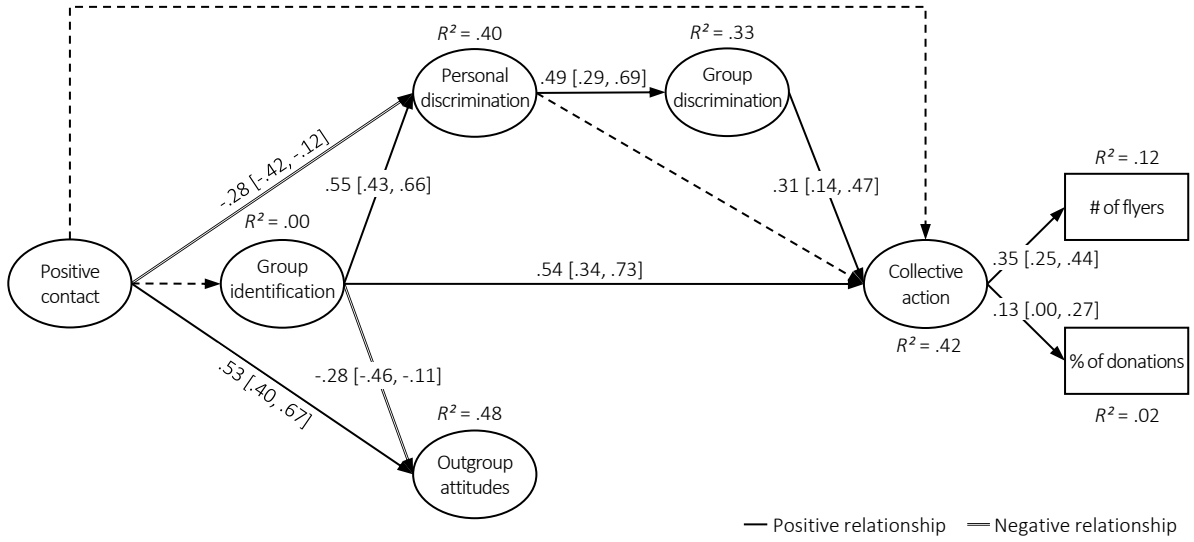

Figure 2. Alternative model including direct and indirect effects of positive but not negative contact for sexual-minority students (Study 1a, n = 233). Previously significant paths are shown as dashed lines. Standardized coefficients are reported. Model fit: χ^2 (154) = 194.17, χ^2/df = 1.26, CFI = .98, TFI = .98, RMSEA = .03.

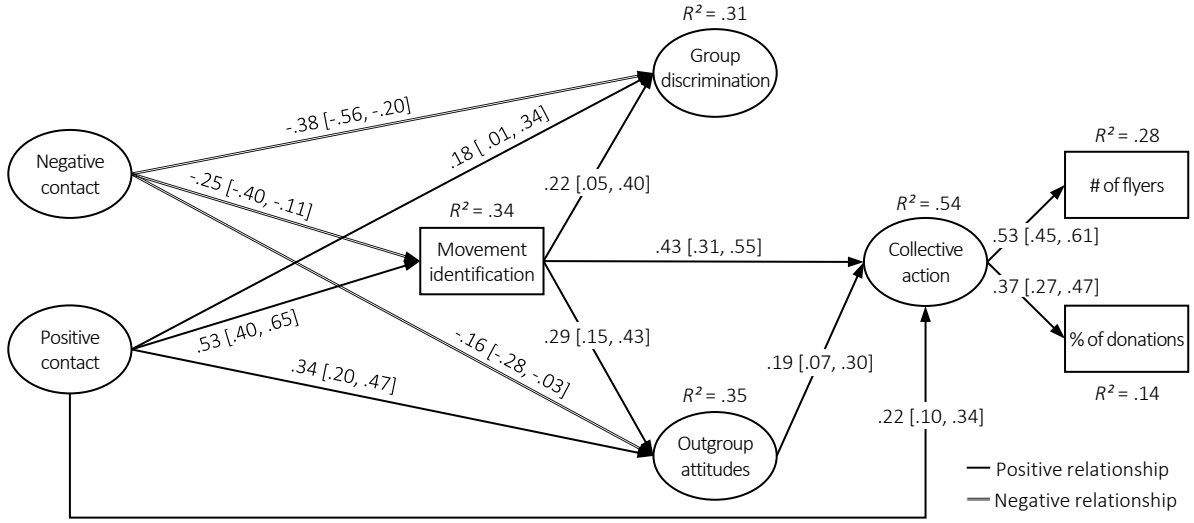

Figure 3. Structural equation model showing direct and indirect paths from negative and positive contact to collective action for heterosexual participants (Study 1b, $n = 249$). Negative and positive contact ($\phi = .02$ [-.16, .20]) were not significantly correlated. Standardized coefficients are reported; only significant paths are shown.

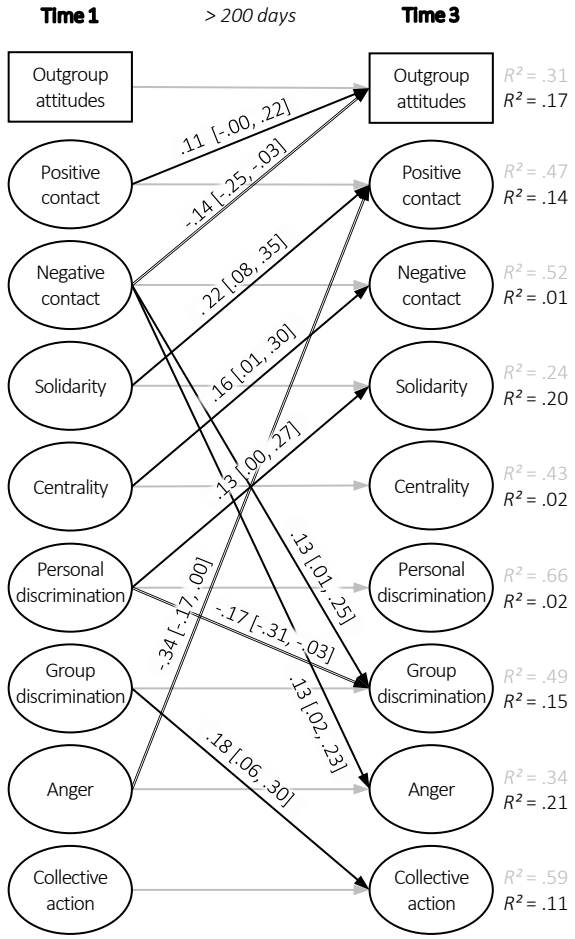

Figure 4. Panel model showing autoregressive (in grey) and cross-lagged (in black) paths for sexual-minority participants (Study 2a, $n = 433$). Negative and positive contact (ϕ = -.19 [-.32, -.05]) were correlated at T1. Standardized coefficients are reported; only significant paths are shown.

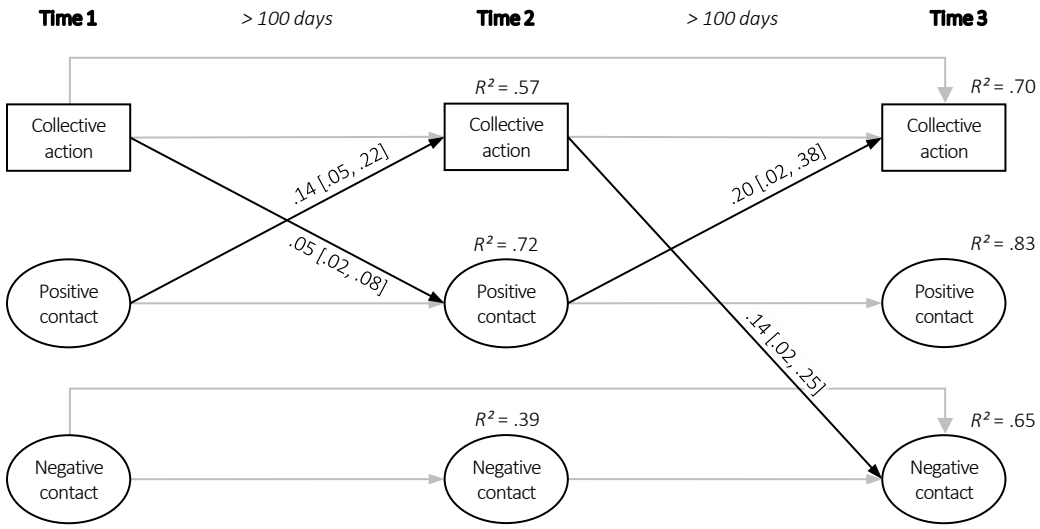

Figure 5. Panel model showing autoregressive (in grey) and cross-lagged (in black) paths for heterosexual/cisgender participants (Study 2b, n = 1,036). Standardized coefficients are reported; only significant paths are shown.

Tables

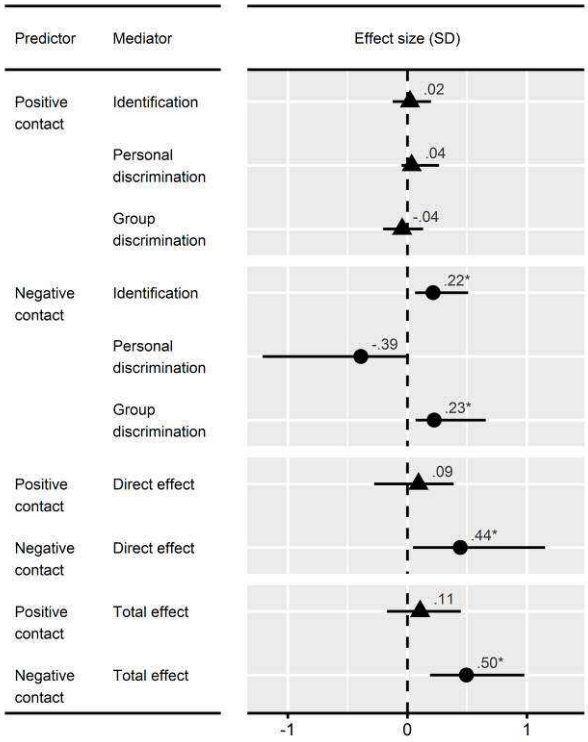

Table 1. Effect sizes with 95% confidence intervals for indirect, direct, and total effects of intergroup contact on collective action among sexual-minority participants (Study 1a). Created with *ggplot2* (Wickham, 2009).

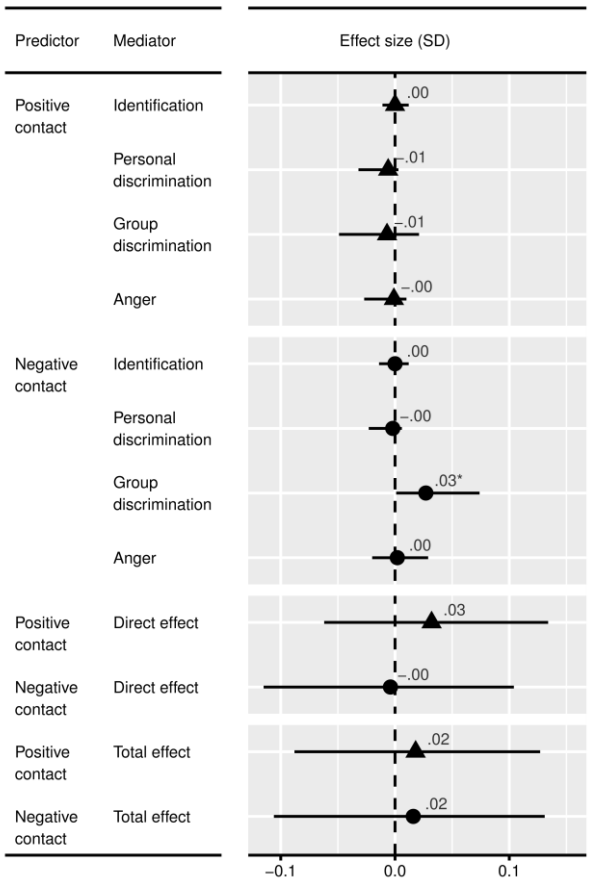

Table 2. Effect sizes with 95% confidence intervals for indirect (half-longitudinal), direct (cross-lagged), and total effects of intergroup contact on collective action among sexual-minority participants (Study 2a). Created with *ggplot2* (Wickham, 2009).